

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The paragraph beginning at page 4, lines 9-15, has been amended as follows:

– Figures 1A-C show[s] inward currents evoked by high K⁺, 5HT and ACh in RNA-injected oocytes. (A) I_{hk} and I_{5HT} in an oocyte injected with atrial RNA + 5HT1A-R RNA. Holding potential in this and all following figures was -80mV. (B) Inward currents evoked by ACh (AcCHO) and 5HT in a single oocyte in hK solution. (C) The dependence of I_{5HT} amplitude on 5HT concentration in oocytes of one frog. In each oocyte, the response to one 5HT concentration was tested. Data represent mean±SEM in 4-6 cells at each concentration.–

The paragraph beginning at page 4, lines 16-26, has been amended as follows:

– Figures 2[.]A-D depict that I_{hk} and I_{5HT} are inwardly rectifying K⁺ currents. (A) Currents evoked by voltage steps from the holding potential of -80 mV to voltages between -140 and 40 mV in 20 mV steps in ND96(a), hK (b), hK in the presence of 5HT (c). Net I_{5HT} (d) was obtained by digital subtraction of (b) from (c). (B) Current-voltage relations of the total membrane current in a representative oocyte in NG 96 (2 mM [K_{out}]; □), in 25 mM [K⁺_{out}]♦); in 75 mM [K_{out}]○, and in hK (96 mM [K_{out}]; ▲). (C) Current-voltage relation of the net I_{5HT} in the same oocyte as in (B) in 25 mM [K_{out}]♦); 75 mM [K_{out}]○, and 96 mM [K_{out}]▲. (D) The dependence of the reversal potentials of total membrane current ▲ and of I_{5HT} ● on [K_{out}]. The straight lines represent least square fits to data (mean±SEM, n=3 for each point).–

The paragraph beginning at page 4, lines 27-28, has been amended as follows:

– Figures 3[.]A-D depict the Ba²⁺ block of I_{hk} and I_{5HT}. (A-C)[,] show records taken from the same oocyte at 10 min intervals. Between the records, the cell was bathed in ND96. 5HT concentration was 4 nM. Note that in (B) 300 μM Ba²⁺ reduces I_{hk} and almost completely blocks I_{5HT}. Ba²⁺ and 5HT were washed out simultaneously, and this resulted in an inward current “tail”. (D) dose dependence of BA²⁺ inhibition of I_{hk} in native oocytes ○, I_{hk} in RNA-injected oocytes , I_{5HT} in RNA-injected oocytes ▽. Data are mean±SEM, n=3 to 7 for each point.–